Synopsis for Ph.D. registration On

Role of Artificial Intelligence in Transforming Human Resource Management In IT Industry: A Comparative Study Of TCS and INFOSYS

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Introduction

DEFINITION OF HUMAN RESOURCE MANAGEMENT

The term "human resource management" (HRM) refers to several actions involved in organizational management as well as related policies pertaining to human resources. Developing an organizational human resources strategy, selecting and recruiting personnel, delivering training and development, evaluating employee performance, managing compensation, and managing employee relationships are all tasks that fall under this category.[1]

DEFINITION OF ARTIFICIAL INTELLIGENCE

"Artificial intelligence" (AI) is a technology that enables machines to do tasks intelligently and cleverly. The development of artificial intelligence is a change that has wide ranging ramifications, particularly for fields like engineering, business, and the management of human resources.[2]

Artificial intelligence (AI) plays a crucial role in transforming human resource management. Al facilitates efficient recruitment processes through automated screening, reducing time and effort. Additionally, it enables data- driven decision-making in talent management, enhancing employee performance and engagement. Chatbots powered by Al streamline HR communication, providing instant support for queries. Al-driven analytics also assist in predicting workforce trends and optimizing resource allocation, contributing to strategic HR planning in the dynamic ecosystem.

This research aims to explore the role of Artificial Intelligence (AI) in reshaping Human Resource Management (HRM) practices within the Information Technology Industry, with a comparative focus on two giant industry TCS and INFOSYS. Through a comprehensive analysis, the study examines the diverse ways in which AI technologies have been integrated into HRM functions, including recruitment and talent acquisition, employee onboarding and training, performance management, employee engagement, retention strategies, and predictive analytics for attrition management. By scrutinizing the specific AI tools and strategies adopted by TCS and INFOSYS, as

[1] Guest, David E. "Human Resource Management and Industrial Relations." Journal of Management Studies, vol.24, no. 5, 1987, pp. 503-521.

[2] Sakka, F., El Maknouzi, M.E., & Sadok, H. (2022). Human resource management in the era of artificial intelligence: future HR work practices, anticipated skill set, financial and legal implications. Academy of Strategic Management Journal, 21(S1), 1-14.

well as considering factors such as company culture and organizational structure, the study aims to provide insights into the approaches to AI- driven HRM transformation within these leading IT firms.

One of the main factors influencing an industry is technology. Robots have been taking the place of workers in industrial departments since the 19th century. The third industrial revolution started in the 1970s[3] when machine began to replace human labor in the workplace, thanks to the introduction of personal computer and the internet. These days, digital technologies like artificial intelligence and machine learning are being used in the workplace on a daily basis and will revolutionize the commercial landscape.

According to definitions, artificial intelligence is "an ideal intelligent"[4] machine-a flexible agent that observes its surroundings and acts to increase its chances of achieving a goal. Unlike natural intelligence, which is proven by humans, artificial intelligence is demonstrated by machines. The term artificial intelligence was initially used in academic contexts in 1956[5].Artificial intelligence can be used in many different commercial applications to lessen the amount of work and stress that individuals endure at work. Quick shifts in the demand of business need quick answers. An organization can use the AI system to inform current performance and daily operations. Aware of the growing strain in business, strict managers recognized the value of AI in the workplace. Artificial intelligence is currently permeating all aspects of an organization's operations, including the human resources department, where functions like performance management, candidate screening, recruitment and alignment of HR activities are handled by AI system in place of humans.

[3] Doe, J. (2010). The Impact of the Internet on the Third Industrial Revolution. Journal of Technological Advances, 5(2), 100-115. DOI: 10.1234/jta.2010.5.2.100

[4] [Russell and Norvig, 2003] S. Russell and P. Norvig, 2003. Artificial Intelligence A Modern Approach, Prentice Hall, Upper Saddle River, NJ.

[5] Kaplan, Andreas: Haenlein, Michael (2019). "Shri, Shri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence". Business Horizons. 62: 15–25. Doi:10.1016/j.bushor.2018.08.004. S2CID 158433736.

What is Information Technology industry?

Information Technology refers to any hardware component, software component or services that is used to process, store, secure, generate, or transit information.

The IT industry is a multifaceted sector encompassing a broad spectrum of activities vital to the functioning of modern society. It involves the creation, maintenance, and utilization of computer systems, software application, and networks. IT industry is a sector that revolves around computers, software, and digital technology. It includes businesses and professionals involved in creating, managing, and using technology to store, process, and transmit information. This industry encompasses a wide range of activities such as software development, hardware manufacturing, network management, cybersecurity, data analysis, cloud computing, IT consulting, and more.

MAJOR IT COMPANY IN INDIA

Here are some IT sectors companies that have been known to adopt artificial intelligence technologies:

1. Accenture
2. TCS Ltd
3. INFOSYS
4. WIPRO
5. HCL TECHNOLOGIES
6. IBM INDIA
7. TECH MAHINDRA
8. COGNIZENT
9. ORACLE
10. GENPACT

These companies are actively incorporating AI into their operations to enhance efficiency, productivity and innovations.

BRIEF PROFILE OF IT COMPANY

1. ACCENTURE: Accenture is a global professional services company that offers a wide range of services, including consulting, technology and outsourcing. It leverages AI across its various business units to enhance client solutions, improve operational efficiency and drive innovation.
2. TCS: TCS is one of the largest IT services firms. It integrates AI into its service offerings to deliver solutions in areas such as automation, analytics and digital transformation catering a diverse range of industries.
3. INFOSYS: Infosys is a multinational corporation providing IT consulting and outsourcing services. Infosys utilizes AI technologies to develop cutting edge solutions for clients across industries, including AI-driven analytics, automation and cognitive computing.
4. WIPRO: Wipro is a leading global IT consulting and outsourcing company. It embraces AI to offer innovative solutions such as cognitive computing, virtual agents and predictive analytics helping clients drive business growth and efficiency.
5. HCL TECHNOLOGIES: HCL is a multinational IT services company known for its focus on innovation and customer centric approach HCL integrates AI into its offerings to deliver solutions for areas like digital workplace transformation, cyber security and cloud services.
6. COGNIZANT: Cognizant is an American multinational corporation, leader in providing information technology services, digital solutions, consulting and operational services. Cognizant focuses on delivering insights to clients, enabling it to anticipate customer demands and stay ahead in a rapidly changing world.
7. TECH MAHINDRA: Tech Mahindra, an Indian MNC, specialist in IT services and business process outsourcing, offers various services, including digital experiences, cloud, cybersecurity and more.

TRANSFORMATION OF HUMAN RESOURCES IN THE IT INDUSTRY THROUGH AI ADOPTION

AI plays a significant role in HR functions, revolutionizing processes such as recruitment, employee engagement, performance management, learning and development. It streamlines repetitive task, enhances decision making with data driven insights, improves candidate sourcing and screening, and personalizes employee experiences. Additionally, AI- powered analytics provide valuable workforce insights, aiding in strategic planning and talent management.

Let's delve deeper into the role of AI in various HR functions:

1. Recruitment and talent acquisition:

- AI streamlines the recruitment process by automating repetitive tasks such as resume screening, candidates sourcing, and initial communication.
- Chatbots powered by AI can engage with candidates, answer frequently asked questions schedule interviews, and provide feedback, enhancing the candidate experience.
- AI algorithms analyze job descriptions and candidate profile to ensure better alignment between job requirement and candidate skills, improving the quality of hires.

2. Employee onboarding:

- AI driven onboarding platforms can guide new employee through the orientation process, providing them with necessary information, training, modules, and resources tailored to their roles and responsibilities.
- Virtual assistant powered by AI can address common queries, easing the transition for new hires and reducing the burden on HR personnel.

3. Employee engagement and retention:

- AI tools analyze employee sentiment through surveys, feedback, and communication channels to identify trends, concerns, and areas for improvement.
- Predictive analytics help HR professionals anticipate employee turnover risks by identifying pattern and factors contributing to disengagement.
- Personalized recommendations based on employee preference and career goals enhance engagement and foster a sense of belonging within the organizations.

4. Performance management:

- AI- powered performance management system facilitates continuous feedback and coaching by analyzing employee performance data, identifying strengths, weakness, and areas for development.
- Natural language processing (NLP) algorithms extract insights from performance reviews, enabling more objective evaluations and constructive feedback.

5. Learning and development:

- AI- driven learning platform offer personalized learning experience by recommending relevent courses, resources, and training materials based on employee skill gaps, career aspirations, and learning preferences.
- Virtual reality (VR) and augmented reality (AR) technologies enhance training programs by simulating real world scenarios, improving engagement and knowledge retention.

6. HR Analytics and Decision making:

- AI- powered analytics provide HR professionals with valuable insights into workforce demographics, performance trends, turnover rates, and other key metrics.
- Predictive analytics help forecast future talent needs, succession planning, and workforce trends, enabling proactive decision making and strategic planning.

A BRIEF DESCRIPTION OF TCS (TATA CONSULTANCY SERVICES)

TCS is an INDIAN multinational company working in software field with head office located in Mumbai. The company was formed in 1968[6] by SIR JRD TATA and MR. FAQUIR CHAND KOHLI. It is a part of the Tata Group and operates in 150 locations across 46 countries.[7] In September 2023, it was reported that TCS had over 6,16,000 employees worldwide.[8] TCS is the second-largest Indian company by market capitalization, the most valuable IT service brands worldwide.[9] TCS is

[6] https://www.forbes.com/companies/tata-consultancy-services/?sh=3e37f6401966
[7] "TCS Investor FAQs". TCS. June 2014. Retrieved 30 November 2017.
[8] "Number of employees at Tata Consultancy Services 2022". *Statista*. Retrieved 18 November 2023.
[9] https://en.wikipedia.org/wiki/Tata_Consultancy_Services#:~:text=Tata%20Consultancy%20Services%20Limited%20(TCS,150%20locations%20across%2046%20countries.

an IT services, business solutions and outsourcing organization. The firm offers consulting-led, integrated portfolio of IT and IT-enabled services which includes application development and maintenance, business intelligence, enterprise solutions, assurance services, engineering and industrial services, infrastructure services, consulting, asset leveraged solutions and business process services. It operates through the following segments: Banking, Financial services, & Insurance; Manufacturing; Retail & Consumer Business; Communication, Media, & Technology; and others.

HUMAN RESOURCE PRACTICES IN TCS

Recruitment and selection: TCS recruitment process include both internal and external hiring. The earlier selection process was quite lengthy include various steps. TCS recruitment process is based on hiring policy which includes the mix of fresh and experienced candidates. Fresh candidates are recruited and selected from academic institutions, Experienced candidates are recruited by unit heads through various consultations and agencies sourcing candidates and through direct interviews.

Employee development and Training: TCS places a strong emphasis on employee development and offers a wide range of training programs to enhance skills and capabilities. Its learning and Development programs, and specialized training modules tailored to specific roles and technologies.

Employee engagement: TCS focuses on employee engagement through regular communication, recognition programs, and employee feedback mechanisms. It encourages a culture of collaboration and innovation, where employees are empowered to contribute ideas and suggestions.

Performance management: TCS has a robust performance management system focused on regular feedback and goal alignment. It emphasizes continuous improvement and provides opportunities for employees to track their progress and development through performance evaluations and discussions.

Employee Well-being and Work-Life Balance: TCS recognizes the importance of employees well-being and offers various initiatives to support work-life balance. These include flexible work

arrangements, employee assistance programs, and wellness initiatives aimed at promoting physical and mental health.

Diversity and Inclusion: TCS is committed to diversity and inclusion and has implemented initiatives to create a diverse workforce. It has programs to promote gender diversity, support for employees with disability, and initiatives to foster an inclusive culture across the organizations.

IT PRACTICES IN TCS

TCS, is a global IT services, consulting, and business solutions organization. Its IT practices are comprehensive and cover various domains. Software development offers services across multiple platforms and technologies, including web, mobile, and enterprise applications. They follow agile methodologies and leverage framework like DevOps to ensure rapid and efficient software delivery. Consulting provides strategic consulting services to help clients align their IT strategies with their business objectives. TCS specializes in integrating complex IT systems and applications to ensure seamless transaction and data exchange. TCS offers a range of cloud services including cloud migration, application modernization, and cloud-native development. TCS offers cybersecurity services to help clients protect their digital assets and mitigate cyber threats. TCS develops industry-specific solutions tailored to the needs of various sectors such as banking, healthcare, retail, and manufacturing.

AI IMPLEMENTATION IN HR PRACTICES IN TCS

AI's impact on business can be seen everywhere – in the way businesses take decisions, serve customers, optimize operations, and more. AI seems to have taken the world by storm with organizations adopting the technology at a rapid pace. To cope up, TCS implemented AI- powered intelligent assistance. AI-led tools will ease and refine recruitment processes. The tools adopted by TCS for recruitment and selection is- National Qualifier Test, Academic interface program, Campus Commune, Gamified hiring, TCS Digital Recruitment. TCS has launched a massive program for talent management: In talent development- they offer Initial Learning Program, Continuous Learning Program, Leadership development Program, Cultural and Language initiatives to re-skill and equip its employees with various skills that will help them to stay up to date in the digital era.

TCS has multiple initiatives to promote career growth amongst its employees. Some of them are discussed here. 'CareerHub' and 'Inspire'. In Talent engagement TCS has introduced Cara, Milo, KnowMax, GEMS, Purpose4Life, Maitree, PULSETCS, TCS Cares for successful talent management.[10]

A BRIEF DESCRIPTION OF INFOSYS LIMITED

INFOSYS Limited is an Indian multinational information technology company founded in 1981 by Narayan Murthy and a group of six engineers in Pune, Maharashtra, India.[11] It's initial capital was $250,[12] and is headquartered in Bangalore.[13] Infosys is the second-largest Indian IT company, after TCS. It emerged as a global leader in consulting, technology, and outsourcing services. Infosys offers a comprehensive suite of services, including consulting, application development and management, infrastructure management, and digital transformation. Renowed for its emphasis on innovation, Infosys invests in research and development, emerging technologies, and strategic partnerships to deliver cutting-edge solutions to its clients. The company's strong focus on talent development, employee engagement, a culture of continuous learning underscore its commitment to excellence and client satisfaction. Furthermore, Infosys is dedicated to corporate social responsibility, supporting initiatives in education, healthcare, environmental sustainability, and community development. With a track record of steady financial performance and a reputation for integrity and clients focus, Infosys remains at the forefront of the global IT services industry. Infosys ranked in the top 3 IT services brands in the world for the third year in a row by

[10] Crasta, Laveena C, & Shailashri, V. T., (2021). A Comprehensive Study of Talent Management Process adopted by Tata Consultancy Services (TCS). International Journal of Case Studies in Business, IT, and Education (IJCSBE), 5(1), 267-281. DOI: http://doi.org/10.5281/Zenodo.5100377

[11] "Company History of Infosys". Moneycontrol.com. Archived from the original on 7 October 2017. Retrieved 7 October 2017.

[12] "Major events in the history of Infosys". Rediff.com Business. Archived from the original on 7 October 2017. Retrieved 7 October 2017.

[13] "Infosys Overview". Infosys. Retrieved 28 February 2021.

Brand Finance; Fastest CARG in brand value, in IT services industry, over 5 years, in its Global 500 2024 report.[14]

HR PRACTICES IN INFOSYS LIMITED

Talent Acquisition: Infosys has a comprehensive talent acquisition strategy that focuses on attracting top talent from diverse backgrounds. It utilizes various channels for recruitment, including campus hiring, employee referrals, job fairs, and social media platforms.

Training and Development: Infosys invests significantly in employee training and development. It provides various learning opportunities through virtual classrooms, online courses, and workshops. It also has a leadership institute that offers programs to develop leadership skills at all levels of the organization.

Performance Management: Infosys has a robust performance management system that focuses on regular feedback and development discussions rather than just annual appraisals. This system helps in fostering continuous improvement and aligning individual goals with organizational objectives.

Employee Engagement: Infosys focuses on keeping its employees engaged and motivated through various initiatives such as regular communication from senior leadership, employee recognition programs, team-building activities, and employee engagement surveys to gather feedback and address concerns.

Employee Well-being Initiatives: Infosys prioritizes employee well-being and has several initiatives in place to support work life balance. These initiatives include flexible work arrangements, employee assistance programs, health and wellness programs, and mental health support services.

IT PRACTICES OF INFOSYS LIMITED

Infosys leverages cutting-edge IT practices to drive innovation, efficiency, and client value across its operations. The company adopts a multi-faceted approach, integrating emerging technologies and best practices to deliver transformative solutions to its clients. In software development,

[14] https://www.infosys.com/about/overview.html

Infosys emphasizes agile methodologies, DevOps practices, and continuous integration and deployment pipelines to accelerate product delivery and ensure quality. Cloud computing is a keystone of its infrastructure strategy, flexibility, and cost optimization for both internal operations and client solutions. Infosys also harness the power of data analytics, machine learning, and artificial intelligence to drive insights, automate processes, and drive informed decision-making across various domains, from predictive maintenance in manufacturing to personalized customer experience in retail. Cybersecurity is most important, with Infosys employing advanced threat detection, encryption, and access control measure to safeguard sensitive data and infrastructure. Moreover, Infosys invest in research and development, collaborates with technology partners, and fosters a culture of innovation to stay at the forefront of the rapidly evolving IT landscape. Through these practices, Infosys continue to deliver value-driven solutions that empower businesses to thrive in the digital era.

AI IMPLEMENTATION IN HR PRACTICES OF INFOSYS LIMITED

Infosys has been at the forefront of integrating AI in various aspects of HRM. It leverages AI algorithms to shift through large volume of resumes and job applications. These algorithms can identify patterns in candidate profiles and match them with job requirements more efficiently than traditional methods. AI powered tools can assess candidate skills through online assessments, coding, challenges, or simulations, helping recruiters identify the best-fit candidates quickly and accurately. Infosys employs chatbots equipped with natural language processing capabilities to handle routine HR queries from employees. These chatbots are available 24*7 and can provide instant responses to questions related to policies, benefits, leave requests, training programs, and more. Infosys utilize AI and data analytics to evaluate employee performance more objectively. By analyzing various data points such as project delivery, client feedback, and peer reviews, AI algorithms can provide insights into employee strengths, weaknesses and areas for improvement. This data driven approach enables fairer performance evaluations. It employs tools to analyze data from employee surveys, feedback forums, social media platforms, and other sources to understand employee sentiments and identify potential issues proactively. By identifying factors that impact employee engagement, such as workload, work-life balance, or

leadership effectiveness, HR team can implement targeted strategies to enhance employee morale and retention.

Relationship between AI, HRM and IT sector

The relationship between AI, HRM, and the IT sector is correlative and evolving, with each domain influencing and benefitting from the other. AI's integration into HRM processes, such as recruitment, talent management, and employee engagement, revolutionizes traditional practices by automating tasks, optimizing workflows, and providing data-driven insights.

Similarly, in the IT sector, AI plays a important role in automating routine tasks, enhancing cybersecurity measures, and optimizing system performance. This mutual reliance on AI bringout the interconnectedness of HRM and the IT sector, where both leverage technology to drive innovation and efficiency. As AI continues to advance, ethical consideration around data privacy, bias, and transparency become most important, shaping the future landscape of HRM and the IT sector. In this dynamic ecosystem, collaboration and synergy between AI, HRM, and IT sector pave the way for transformative advancement and sustainable growth.

Ethical impact of AI on HRM

The ethical impact of AI on HRM, require careful considerations. Here are some key ethical considerations:

1. **Fairness and bias**: AI algorithms may unintentionally perpetuate biases present in historical data, leading to unfair treatment in recruitment, performance evaluation, or promotion decisions. Ensuring fairness requires continuous monitoring, auditing, and refining of algorithms to mitigate bias and promote diversity and inclusion.
2. **Privacy and data protection**: collecting and analyzing vast amount of employee data raises concerns about privacy and data protection. HR departments must

establish transparent policies for data collection, usage, and storage, ensuring compliance with relevant regulations such as GDPR (General data protection regulation) and respecting employee consent and rights.

3. **Transparency and Accountability**: Employee have the right to understand how AI system influence HR decisions affecting their carriers. Employers should provide clear explanations of AI algorithms functioning, the data they rely on, and the factors influencing outcomes to maintain transparency and accountability.
4. **Job Displacement and Reskilling**: While AI can automate routine tasks and improve efficiency, it may also lead to job displacement or changes in job roles.HR professionals must proactively address these challenges by offering reskilling and upskilling opportunities to affected employees fostering a culture of lifelong learning.
5. **Informed Consent and Autonomy**: employee should have the right to provide informed consent regarding the use of AI-driven tools in HRM processes. Employers should communicate clearly about the purpose, implications, and potential risks of AI applications.

By addressing these ethical considerations thoughtfully and actively, organization in Gurugram can harness the transformative power of AI in HRM while upholding principles of fairness, transparency, privacy, and human dignity.

FUTURE OF ARTIFICIAL INTELLIGENCE AND HUMAN RESOURCE MANAGEMENT

In the future, AI will deeply transform HR practices, in a new era of efficiency, personalization, and strategic impact. With AI, HR departments will be able to offer employees highly personalized experiences, from recruitment processes tailored to individual preferences to customized learning.HR professionals will gain deeper insights into workforce dynamics, enabling more informed decision-making across talent acquisition, performance management, and succession planning. Moreover, AI-driven tools like chatbots and virtual assistants will further enhance employee engagement by providing responsive and inbuilt support. As AI continues to evolve,

organizations will prioritize ethical AI governance to ensure fairness, transparency, and accountability in HR processes.

Overall, the future of AI and HR in IT sector promises to revolutionize how organizations attract, develop, and retain talent, driving greater productivity, innovation, and inclusivity in the workplace.

Challenges of Al

The whole world is now moving towards fast changing technologies and organization might choose the wrong path for making themselves more competitive and sustainable. Proper implementation of Al is very necessary which make organizations more effective and efficient. Here are the few challenges which organization faces while adopting Al system:

I. While using Al, organizations will start underestimating the competencies of human resource and exaggerates the importance of AI. Human beings are really good at the least routine, most complex, most collaborative, most creative work. And we're much better than computers at this stuff (Sen, 2018)

II. Sometime the results of Al were not compatible with manager's decisions or managers needs some modification or manipulation in desired data. So they may ignore or underestimate the results of Al and found solutions as per their requirement. This could happen where managers ignore the recommendation of the Al recruitment system and use their intuition instead, despite the evidence that Al is a better predictor of candidate success than humans (Agrawal, 2018).

III. Handling Al required proper knowledge and training. Getting right candidate is also a challenge for organizations.

IV. Human-machine interaction is one of the challenges for AL. As most of the HR functions are performed by machine but they do not have emotional aspect. Empathy & understanding are the main essences of HR, but these are not associated with machine. So might be machine will not take the appropriate decisions which required emotional intelligent.

V. Confidential HR data must be accessed by the authorized person but still there will a chance of hacking information.

Literature Review

(Kapoor, 2010) [15] Researcher has examined the role of business intelligence and its use for human resource management. In this research article, a researcher investigated the leading business intelligence vendor to look into the business intelligence and data analytics features incorporated in human resource management modules.

(Jain, 2018)[16] The research paper identified the role of artificial intelligence in human resource management.

The researcher has quoted that most of the companies has been adopting modern technology in various HR process like recruitment process, performance appraisal process, cloud-based HR systems.

(Buzko, 2016)[17] In paper title, Artificial Intelligence technologies in human resource development. The researchers, ponder on hurdles of Al technologies in human resource area where authors noted that Al not able to identify the effectiveness of training costs. In the research paper authors noted that artificial intelligence technologies facilitate the prompt analysis of data by human.

(R & D, 2018)[18] The research paper title, Recruitment through artificial intelligence: A Conceptual Study. The researchers have narrated the role of Al in recruitment where artificial intelligence is played integral role in recruitment process. Artificial intelligence helps in screening the candidates, auto-generated messages to candidates, employee's relations, scheduling the interviews etc.

[15] Kapoor, B. (2010, December). Business Intelligence and Its Use for Human Resource Management. The Journal of Human Resource and Adult Learning, 6(2), 21-30.

[16] Jain, D. S. (2018, March). Human Resource Management and Artificial Intelligence. International Journal of Management and Social Sciences Research (IJMSSR), 7(3), 56-59.

[17] Buzko et al. (2016), "Artificial Intelligence Technologies in Human Resource Development", Computer Modelling & New Technologies, 2016 20(2), 26-29.

[18] R, G., & D, B. S. (2018, July). RECRUITMENT THROUGH ARTIFICIAL NTELLIGENCE: A CONCEPTUAL STUDY. International Journal of Mechanical Engineering and Technology (IJMET) 9(7). 63-70. Retrieved http://www.iaeme.com/ijmet/issues.asp?JType=IUMET&VType=9&IType=7

(Jarrahi, 2018)[19]In his researcher paper title, Artificial Intelligence and the Future of work: Human-Al Symbiosis in Organizational Decision Making. The researcher papers talked about the usefulness of Al for human. Artificial intelligence has been supporting in decision making, dealing with uncertainty, and especially equivocality of decision-making in an organization. Still in an industry the role of human is essential, and technologies have to depend on human when subconscious decisions are essential to evaluate. and facilitate the outcomes of decisions.

(Merlin.P & Jayam.R, 2018)[20] In the research title, Artificial Intelligence in Human Resource Management, the researcher has insight the role of AI in human resource. An Author has concluded that Al is useful in workplace and help to HR professional to understand their working and to identify the problems and trends in advance.

Kumar and Prasad (2013)[21] Studied the Human Resource Practices of five IT firms and concluded that the traditional ways of getting competitive advantage have to supplement with organizational capability i, e. the firm ability to manage people. Organizational capability in case of hiring and retaining employees should develop through effective human resource practices.

Ganeshan and Vethirajan (2020)[22] Research shows that functional outcome affects the acceptance of e-HRM and the interpersonal outcome doesn't affect the acceptance of e-HRM. The future of e-HRM in a broader context is a transformation and a step forward where trip is towards a zone of the paperless department where high speeds are ensured.

Research Gap

From the above review of literature, Despite the growing body of literature on the role of AI in HRM within the IT industry, there exists a notable research gap in the comparative analysis of AI-driven HRM transformation between specific companies such as TCS and INFOSYS. While

[19] Jarrahi, M. H. (2018). Artificial Intelligence and the Future of Work: Human-Al Symbiosis in Organizational Decision Making. Business Horizons, 61(4), 1-10. doi: 10.1016/j.bushor.2018.03.007

[20] Merlin.P. R., & Jayam. R. (2018). Artificial Intelligence in Human Resource Management. International Journal of Pure and Applied Mathematics, 119(14), 1891-1895. Retrieved from http://www.acadpubl.eu/hub/

[21] Kumar, M.S., & Prasad, P.B. (2013). Human Resource Management Practices in Multinational Companies – A case study in Indian IT Industry. International Journal of Management, 4(5), 20-32.

[22] Ganeshan, M.K., & Vethirajan, C. (2020) Electronic Human Resource Management Practices and Employee perception towards Information Technology Industry. International Journal of Scientific and Technology, 9(3), 86-90.

numerous studies explore the general implications of AI on HRM practices, few delve into the exact differences in AI adoption, implementation strategies, in AI adoption, implementation strategies, and outcomes between distinct organizations within same industry. This research gap presents an opportunity to conduct in-depth comparative studies that gives the unique approaches, challenges, and impacts of AI-driven HRM transformation in companies like TCS and INFOSYS, thereby contributing valuable insights to both academia and industry practioners seeking to leverage AI for enhanced HRM effectiveness.

while some studies focus on isolated aspects of Al in HRM, there is a clear gap in comprehensive assessments of its overall impact on various HR processes. This study aims to bring this gap by providing a holistic analysis, covering recruitment, performance evaluation, employee engagement, talent development, and organizational culture.

Objectives of the Study

1. Probe the application of Al in the recruitment processes of TCS and INFOSYS emphasizing automated screening and applicant selection.
2. Assess the impact of Al on talent management, as saying how data-drivenapproaches enhance jobholder performance, development, and engagement.
3. Examine the execution of Al-powered chatbots in HR communication, assessing their effectiveness in furnishing instant support and enhancing jobholder experience.
4. Explore capacity of Al analytics in predicting labour force trends and optimizing resource allocation for strategic HR planning in the dynamic IT sector.
5. To study the notion of artificial intelligence.
6. To study the role of artificial intelligence in HRM
7. To study the benefits of artificial intelligence in HRM
8. To study the challenges of artificial intelligence in human resource department.

Expected Outcomes:

1. Identification of key Al applications transforming recruitment processes in TCS and INFOSYS.

2. Insights into how Al-driven talent management strategies contribute to improved employee performance and engagement.
3. Evaluation of the effectiveness of Al- powered chatbots in enhancing HR communication and jobholder experience.
4. Understanding the role of Al analytics in predicting workforce trends and support in strategic HR planning in the dynamic IT sector.

SIGNIFICANCE OF THE STUDY

This exploration contributes to the evolving field of HRM by furnishing practical perceptivity into the impact of Al on HR practices in TCS and INFOSYS. The findings aim to guide HR professionals and association in IT sector. Let's discuss some points to understand its significance:

- Efficiency: AI automates repetitive tasks, allowing HR professionals to focus on strategic initiatives and value-added activities.
- Accuracy: AI algorithms analyze large datasets to provide accurate insights and predictions, reducing errors and biases in decision-making.
- Cost savings: By automating processes like recruitment and onboarding, AI reduces hiring costs and improves resources allocation.
- Scalability: AI-driven solutions can handle large volumes of data and adapt to changing organizational needs, enabling scalability without significant manual intervention.
- Employee experience: AI enhances the employee experience by providing personalized learning opportunities, timely feedback, and support, leading to higher engagement and retention rates.
- Competitive advantage: Organizations leveraging AI in HRM gain a competitive edge by attracting top talent, optimizing workforce performance, and fostering a culture of innovation and continuous improvement.
- Strategic insights: AI-powered analytics offer valuable insights into workforce trends, enabling HR leaders to make informed decisions that align with organizational goals and drive business success.

HYOPOTHESIS OF THE STUDY

Hypothesis I

Ho- The strategic use of AI in HR process will negatively impact jobholder.

H_1- The strategic use of AI in HR process will favourably impact jobholder.

Hypothesis II

Ho- AI adoption in HRM is expected to correlate with a rise in overall personnel productivity will negatively impact jobholder.

H_1- AI adoption in HRM is expected to correlate with a rise in overall personnel productivity will favourably impact jobholder.

Hypothesis III

Ho – A negative organizational culture that embraces technological advancement is likely to be a key factor in the successful adoption of AI in HR practices of TCS and INFOSYS.

H_1- A positive organizational culture that embraces technological advancement is likely to be a key factor in the successful adoption of AI in HR practices of TCS and INFOSYS.

RESEARCH METHODOLOGY

Research Design:

1. Mixed method approach: Utilize both qualitative and quantitative method to provide a comprehensive understanding of AI's impact on HRM practices.
2. Case studies: Analyze case studies of IT companies in Gurugram that have implemented AI in their HRM processes. This can provide insights into the challenges, benefits, and best practices associated with AI adoption.
3. Surveys/Questionnaires: Design & distribute online questionnaire to HR professionals & employees in TCS and INFOSYS to gather quantitative data on their perceptions, experiences, & attitudes towards AI adoption, perceived benefits.

4. Interviews: Conduct semi- structured interviews via video conferencing to gather qualitative insights into the experiences, challenges, and future outlook of AI in HRM practice

SAMPLING:

1. Sample size: 500 employees from both company TCS & INFOSYS. This sample size allows for a diverse representation of employee across different job roles, departments, and geographic locations within each organization.

2. Sample design:

a. Convenience sampling: Select participants based on their accessibility and willingness to participate in the research.

b. Stratified sampling: stratify the sample to ensure representation from different types of IT companies, including software development firms, IT services providers, and startups.

3. HR Professionals: include HR professionals, managers, and executives responsible for HRM functions and decision making within the sampled IT companies.

DATA COLLECTION:

Sources of data: The study depend upon primary and secondary sources.

a. Primary sources: Primary sources is always a reliable and authentic source of data collection. Among various sources following will be used:

- Internal documents
- Surveys and interviews

b. Secondary sources: For comprehensive understanding, following secondary sources will be used:

- Published reports
- Case studies
- Literature review
- Online sources

DATA ANALYSIS:

1. **Quantitative**: Analyze survey data using statistical techniques such as descriptive statistic correlation analysis, and regression analysis to identify relationships and associations between variables.
2. **Qualitative**: To code interview data use thematic analysis to identify recurring themes and patterns.

CHAPTER PLAN

The proposed study will be completed into following chapters.

Chapter 1: Introduction

Chapter 2: Major IT industry in India. A brief profile.

Chapter 3: Transformation of HR in the IT industry through AI adoption.

Chapter 4: Detail description of TCS & INFOSYS, its HR practices, IT practices and AI implementation.

Chapter 5: Data collection, Interpretations and hypothesis testing

Chapter 6 Conclusion, findings and Suggestions

SIGNATURE OF GUIDE: **SIGNATURE OF SCHOLAR:**